

Obituary Notice of Edouard Desor. By J. P. Lesley.

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The winter of 1881-2 will be remembered for the great losses which the world of culture suffered in rapid succession : Draper, Longfellow, Emerson, in America ; Darwin and Desor in Europe. Other names, also, were erased from the roll of the world's prophets ; but these were teachers of the prophets—primates and patriarchs in the hierarchy—masters on whom others depended, and to whom they deferred—leaders in the procession of thought and expression of thought—founders of styles and methods—builders of superior edifices of human knowledge and human taste ; characterizing the century in an active as well as a passive mood, and therefore leaving Christendom in mourning for their disappearance.

The world remarks that these men were much beloved. They were gentle, loving beings, as amiable as they were vigorous of soul. That the world loved them and heard them gladly proves that the world is better than it was. That they could sing, and think, and work, without molestation, proves that the world is wiser than it was. The powers hostile to human enlightenment have lost their thrones ; personal liberty is established. The tribune and the press are, the pulpit is becoming, enfranchised. And as with personal liberty a higher tone of private morals has supervened, so with liberty of speech and pen has come into the life of Christendom a gentler spirit of controversy and a more judicial method of investigation. Fear is the mother of cruelty and its brood of vices intellectual and physical. Persecution has always bred heresy. The excommunicated hate the excommunicators ; exiles are emancipated from all respect and affection for government. The suppression of ideas by physical force is like the compression of explosives ; times are always coming to apply the match or pull the trigger. Men who are forced to fly from their ancestral homes to begin a new career elsewhere, acquire rapidly by the struggle for life a noble development of all their powers ; gaze upon the new world around them with new eyes ; inform themselves of what would never have interested them ; ally themselves with the strongest and wisest whom they find ; invent enterprises ; place scaling ladders against the ramparts of fame, and in the end come to be of the number of the world's rulers.

Such was the experience of the man whom, as a member of this Society, we remember and lament, Edouard Desor of Neuchâtel.

The Desors were Huguenots expelled from France by the revocation of the edict of Nantes. They settled in Hesse-Homburg, and helped to form there a little colony which retained in use the French language in their dwellings, schools and churches, while it adopted the German language for intercourse with the world around.

In 1811 (Feb. 13th) our late distinguished fellow-member Edouard Desor was born at Friedrichsdorf near Frankford-on-the-Main. He was

baptized Pierre Jean Edouard, but his publications and his literary correspondence show that he had dropped the first two names, and few persons were aware of his having any other personal designation than Edward.

His father's name was Jean Desor, and his mother's maiden name was Christine Albertine Foucar.

"Desor" was originally "Des Horts," meaning "of the gardens." A Catholic branch of the family Des Horts still reside at Marsillargues, in the south of France, on the route from Lunel to Aigues-Mortes. From this little village many Protestant families were chased into exile, by Louis XIV, in 1685. M. Fritz Berthoud in his "*L'Hiver au Soleil*," describes how, in one of their journeys to the Mediterranean coast, Desor and he stopped to make the acquaintance of this scene of persecution.

Jean Desor, at Friedrichsdorf, conducted one of those manufactures which France lost by the folly of her so-called Great Monarch. He died and left his two boys to the care of their mother; but she, too, worn out with misery and loneliness, died, and they grew up as best they could.

Young Desor's education was, however, on the whole a good one; and the peculiar constitution of his native town gave him this advantage: French and German were alike his mother-tongue. This made it easy for him, when the time came, to lead a useful life in Paris, and to settle finally at Neuchâtel, where both languages are spoken alike by all.

He acquired a good knowledge of English, also. Several years of residence in the United States made our language as familiar to his ear and tongue as his own native dialects. Although he never overcame the difficulty of pronouncing such sounds as *th*, and always spoke of *sick* and *sin* rocks, he nevertheless wrote English in a singularly pure style, and spoke it with admirable precision and force. His long intercourse with Italian geologists and his frequent residences in Italy gave him command of the Italian language.

His earlier education was gained at the gymnasium in Hanau. Thence he was transferred to the University of Giessen, and commenced his studies for the legal profession, which he afterwards continued at the University of Heidelberg. His elder brother adopted the career of a physician.

At Giessen also was educated Desor's colleague in science and life-long bosom friend, Karl Vogt, who was six years his junior, and who still survives to mourn his loss. Vogt afterwards studied chemistry with Liebig at Heidelberg, and (1835) anatomy and physiology with Valentin at Berne, when Desor was already established with Elie de Beaumont in Paris.

As his forefathers had been persecuted out of France into Germany for their religious and political heresies, so Desor and his brother were driven back from Germany into France by persecution, on account of their enthusiastic sympathy with the revolutionary excitement of 1830, which pervaded all Europe, the principles of which were elaborated in the universities of Germany, and preached and practised by the entire burschen-

schaft, inflamed with vague hopes of a repetition of the French revolution, the destruction of irresponsible princedoms, and the liberation and unification of the Fatherland. Vogt fled to Switzerland. Desor's brother, after a short stay in Paris, settled also in Switzerland, at Neuchâtel, although that canton was an appanage of Prussia, and its inhabitants spoke French and German indifferently. But Desor himself remained in Paris from 1832 onwards until his brother's marriage to a wealthy lady, M^{lle} de Pierre, in Bôle-over-Colombier, proved too strong an attraction, and he became a Swiss, not only in residence, but in heart and soul and character, and remained a Swiss to the last day of his life.

In Paris he tried at first to support himself by translating, for a French publisher, Ritter's *Erdkunde*. He was also employed by Dr. Hahnemann as his private secretary. I have heard him affirm of his own knowledge that the transfer of simple homœopathy on to the transcendental ground of infinitesimal doses, with correspondingly high powers, was the work of Madame Hahnemann; her husband having nothing to do with it.

In Paris, Desor studied geology under Elie de Beaumont who, then 34 years old, had become Professor of Geology in the College of France in 1832 the year of Desor's expatriation.

This year of 1832 is famous in the history of our science, for it marks best the date of the labors of Sedgewick and Murchison in England and Wales. It was also the year of the cholera. In 1833 Elie de Beaumont was made Chief Engineer of Mines; and with Dufrenoy commenced the preparation of the great geological map of France, published in 1841. His *Mountain Systems* did not appear until 1852; but during the interval of 20 years he was elaborating that masterpiece of geological genius in lectures which raised him to the pinnacle on which he stood until his death as the greatest living geologist, while it overthrew the factitious reputation of his great popular rival Leopold von Buch.

Desor, however, was not much influenced by the special views of his great master regarding the structure of the earth, and was too much influenced by the vague notions of the Swiss geologist Thurman, who tried to apply a modification of Von Buch's elevation theory to the anticlinals of the Jura. Nor is it strange that Desor, only 21 years old, should not have been more influenced by Elie de Beaumont's peculiar structural theories. It cannot be otherwise, however, than that his subsequent devotion to geology was born in him by the teaching of his great master. In after years he threw himself with ardor into orographic research; but it was always more practical than speculative; and the extensive orographic studies which he continued at intervals until his death were probably mainly due to his experiences on the glacier of the Aar. His memoirs on the Massifs of the Alps are inspired by quite a different motive from that which impelled Elie de Beaumont to the construction of his crystalline globe. For Desor the structure of valleys through which descended his glaciers was the main thing! The surface, and not the underground, held

his attention. His systematization of Alpine ranges is wholly topographical; not at all mineralogical, much less plutonic. In my many conversations with him I heard no theory escape his lips which went deeper than the erosion of the surface, nor was Elie de Beaumont ever alluded to. His orography was essentially systematic and descriptive.

He accompanied Elie de Beaumont to the meeting of the Helvetic Society, at Neuchâtel, in 1837, and there became acquainted with Agassiz; and this became the turning point of his intellectual life. But the first result of the influence which Agassiz exerted over him was hostile to any train of thought suggested to him by Elie de Beaumont. It drew him first into the study of the fossil forms in the rocks of the Jura Mountains, and then into the study of the glaciers of the Alps. It was not until Desor joined the corps of Pennsylvania geologists, in 1852, that his eyes were really opened to the wonderful phenomena which had long before inspired the genius of Elie de Beaumont to reconstruct the fundamental axioms of structural geology. In fact, the bent of Desor's mind was for investigating the forms and habits and metamorphoses of the animal world; and the large way in which he afterwards pursued these studies was due not to the instructions of Elie de Beaumont in Paris, but to the influence of the superior genius of Louis Agassiz in Neuchâtel, and through Agassiz of that coryphæus of modern science, Agassiz's great master, Cuvier.

After his return from America to Switzerland Desor studied the structure of the Jura Mountains with a clearer vision; but, while his definition of structural forms was singularly precise and complete, his theoretical conclusions were always based on more violent hypotheses than those in vogue in the school of Lyell. He remained to his last days a moderate cataclysmist both as to plication and as to erosion.

After leaving Paris to take up his permanent residence in Switzerland Desor lived for a short time in the house of Professor Vogt, the father of Karl Vogt, in Berne. At one of the annual reunions of the Helvetic Society of Natural Sciences Vogt introduced Desor to Agassiz, who induced him to settle in Neuchâtel. Agassiz, born in 1807, was only 4 years older than Desor, and they soon established a close brotherhood in society and science, which lasted nearly twenty years. Agassiz had studied medicine at Zurich, Heidelberg and Munich; but by a curious accident, which he was fond of narrating, his residence in the same house with an old man whose rooms were filled with preparations of fish, Agassiz became enamored of that special branch of Natural History; had studied the fish brought from Brazil by Martins & Spix, and published his Latin description of them in 1829-31; and was appointed Professor of Natural History at Neuchâtel in 1832, where he was now in the full tide of his researches into the nature and distribution of fossil fish. It was during a visit to Paris that Agassiz made friends with Cuvier and Humboldt; and at Paris his great work on the Classification of Fish went through the press during the ten years from 1832 to 1842.

The summer vacations of Agassiz were spent on the glacier of the Aar.